iDimension[®] Plus

Adjustable Pole Dimensioning System

Assembly Instructions





PN 227298 Rev A

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www.ricelake.com

Revision History

This section tracks and describes manual revisions for awareness of major updates.

Revision	Date	Description			
A	February 24, 2025	Initial release			

Table i. Revision Letter History



Technical training seminars are available through Rice Lake Weighing Systems. Course descriptions and dates can be viewed at <u>www.ricelake.com/training</u> or obtained by calling 715-234-9171 and asking for the training department.

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Rice Lake continually offers web-based video training on a growing selection of product-related topics at no cost. Visit <u>www.ricelake.com/webinars</u>

1.0 Introduction

This manual provides assembly instructions for Adjustable iDimension Plus (226071).

When interfacing this device to a third party software, please reference the software manufacturer's documentation for setup and configuration parameters as necessary.



Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals

Warranty information is available at www.ricelake.com/warranties

iDimension QubeVu Administrator Guide

The iDimension Plus QubeVu Administrator Guide (PN 221652) provides a detailed overview of the QubeVu Manager, the firmware of the iDimension Plus. The QubeVu Manager is a software provided to set up and configure the iDimension Plus. This software is recommended for use by a technical systems administrator.

1.1 Safety

Safety Definitions:



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. Includes hazards that are exposed when guards are removed.

WARNING: Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. Includes hazards that are exposed when guards are removed.



CAUTION: Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury.



IMPORTANT: Indicates information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

General Safety



Do not operate or work on this equipment unless this manual has been read and all instructions are understood. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any Rice Lake Weighing Systems dealer for replacement manuals.



Failure to heed could result in serious injury or death.

Electric shock hazard!

There are no user serviceable parts. Refer to qualified service personnel for service.

The unit has no power switch, to completely remove power from the unit, disconnect the power source at the AC outlet.

The socket outlet must be installed near the equipment and be easily accessible.

When cycling power, use the in-line power cord at a power outlet, do not remove power at the base.

Always disconnect from main power before performing any work on the device.

Do not allow minors (children) or inexperienced persons to operate this unit.

Do not operate without all shields and guards in place.

Do not place fingers into slots or possible pinch points.

Do not use this product if any component is cracked.

Do not make alterations or modifications to the unit.

Do not remove or obscure warning labels.

Do not use near water, avoid contact with excessive moisture.

Keep the unit dry.

Retain packaging. When transporting the unit, always disassemble and pack it in its original packaging.



Use only the supplied power adapter. Never short-circuit the power adapter or the device.

Operate between 32–95° F (0–35° C).

Never remove the iDimension Plus head cover or the electrical connection panels at the base of the column assembly.

Never modify or attempt to repair the unit. Service must be performed by authorized Rice Lake Weighing Systems dealer or service personnel.

Handle cables and cable connectors with care. Never use damaged power cords or plugs or loose electrical sockets. Never touch the power cord with wet hands.

Ensure that the base plate, pole assembly and head unit are all securely attached before attempting to move the unit.

Never lift the unit by grasping only the pole assembly; ensure that both sections of the pole assembly and the base plate are supported.

Never drop or impact the scanner head.

Mount on a flat surface.

Never use product for anything other than its intended purpose.

1.2 Disposal



Product Disposal

The product must be brought to appropriate separate waste collection centers at the end of its life cycle.

Proper separate collection to recycle the product helps prevent possible negative effects on the environment and to health, and promotes the recycling of the materials. Users who dispose of the product illegally shall face administrative sanctions as provided by law.



2.0 Overview

This section provides an overview of the parts included with the iDimension Plus with Adjustable Column Mounting System.

2.1 iDimension Plus Parts

The iDimension Plus is comprised of several parts, including some that are pre-installed in the column assembly. Immediately after unpacking the iDimension Plus, visually inspect the contents to ensure all components are included and undamaged. If any parts were damaged in shipment, notify Rice Lake Weighing Systems and the shipper immediately.



Table 2-1. Adjustable iDimension Plus Parts List



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Part	Part No.	Description	Qty.
	226476	Display Clamp bracket NOTE: This part is pre-installed. on the lower column.	
	226477	Display Mount NOTE: This part is pre-installed. on the lower column.	
	192050	10 inch Display	1
	201028	AC Power Cable	1
	226562	Power Supply	1
	206585	Calibration and Test Object	1
	220008	Hex Key, 2 mm	1

Table 2-1. Adjustable iDimension Plus Parts List



Part	Part No.	Description	Qty.
	220009	Hex Key, 2.5 mm	1
	220010	Hex Key, 3 mm	1
	220011	Hex Key, 4 mm	1
	211219	Head Spacer NOTE: This part is only used when mounting scanner head to an external frame using kit 198708.	1

Table 2-1. Adjustable iDimension Plus Parts List



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2.2 Fasteners Used During Assembly

Table 2-2 lists the fasteners and where they are used during assembly.



Table 2-2. iDimension Plus Parts List



NOTE: Fastener illustrations are not to scale.



Assembly 3.0

The iDimension Plus is provided with several pre-installed components including: column wiring, head mounting bracket, and display bracket, display clamp bracket. The remaining assembly includes installing the base, monitor, and scanner head.

NOTE: A hex wrench set is included with the iDimension Plus and may be used for assembly.

3.1 **Unit Assembly**

The iDimension Plus is assembled in five procedures:

- Attach the Base on page 11
- Install Scanner Head on page 16
- Adjust the Column Height on page 12
- Connect Power and Accessory Cables on page 18

Install Display on page 14

3.1.1 Attach the Base



CAUTION: The column assembly is comprised of an upper column partially contained by a lower column. Until the column assembly screws are installed (see page 16), the upper and lower column assemblies can move independently of each other.

1. Position the column on a flat surface with the end of the column assembly overhanging the edge.



Figure 3-1. Column Assembly on Flat Surface

2. Install the base to the bottom of the lower column with eight M5-0.8x16 flat hex bolts (196244).

NOTE: Ensure the base's textured side faces toward the column assembly, while the smooth side faces away from the column assembly.



Figure 3-2. Install Base

3. With the base installed, position the assembly on the ground with the column upright.



3.1.2 Adjust the Column Height

Securing the iDimension Plus upper and lower columns changes the total height to either 48 in (1.2 m) or 60 in (1.5 m). The 60 in (1.5 m) height is recommended for most installations. Typically, 48 in (1.2 m) is reserved for installations with height restrictions.

1. Pull the upper column upward until six height adjustment holes in the upper and lower columns align.

NOTE: There are two sets of height adjustment holes, the first set positions the height at 48 in (1.2 m) while the second at 60 in (1.5 m). Six holes are exposed on the upper column when the assembly height is set to 60 in (1.5 m).



Figure 3-3. Extend Column Assembly

2. Secure the upper and lower columns with six M4-0.7 x 12 mm screws (225899).



Figure 3-4. Secure Upper and Lower Columns



3.1.3 Install Display Mounting Bracket

NOTE: The display mounting brackets are pre-installed on the lower column. This section is provided for reference. Proceed to Section 3.1.4 on page 14 to continue assembly.

- 1. On the lower column, align the clamp in between the column height adjustment holes.
- 2. Secure the display bracket (226475) to the display clamp (226476) with four M4-0.7x10 mounting bolts (196863).

NOTE: The clamp and display mount are pre-installed facing forward. The clamp and display mount can be repositioned to any side of the lower column at 90, 180, 270 or 360 degrees.



Figure 3-5. Install Display Bracket and Clamp

3. Align display mounting brackets and secure with two M4-0.7 x 16 thumb screws (226631).



Figure 3-6. Install Display Mounting Bracket

3.1.4 Install Display

1. Attach the display to the mounting bracket (226477) with four M4-0.7x6 screws (196247).



CAUTION: Do not over tighten screws.

NOTE: The display mounting bracket is pre-installed on the lower column. In Figure 3-7 the column is removed for mounting hardware clarity.



Figure 3-7. Install Display Mounting Bracket

2. Adjust he monitor angle by loosening the two M4-0.7 x 16 thumb screws (226631), repositioning the display and then tightening the thumb screws.



Figure 3-8. Display Angle Adjustment

3. Connect the USB cable protruding from the rear of the lower column to the display.

3.1.5 Connect Monitor USB Cable

The monitor included with the iDimension Plus contains one USB port for video input (via DisplayLink). The USB port and cable are keyed and only connect in a specific orientation.

Observe the guides on each side of the USB cable and in the USB port. The USB cable guides fit under the guides in the USB port. Also, observe the cable retention clip, this must be pressed down when inserting the USB cable into the USB port.



Figure 3-9. USB Cable and Port Guides

- 1. Position the USB cable over the retention clip and align the cable guides with the USB port guides.
- 2. Press the USB cable connector down on the cable retention clip to compress the cable retention clip.
- 3. Insert the USB cable into the USB port with both cables guides under the port guides.
- 4. Align the USB cable plug with the USB port and then connect.
- NOTE: To align the cable plug with the USB port, the cable plug must be raised slightly upward (away from the monitor). To raise cable plug upward, press down on the back of the cable connector on the cable retention clip to angle the front of the cable plug upward.





Figure 3-10. Inserting USB Cable into USB Port



3.1.6 Install Scanner Head

1. Attach four M4-0.7x10 mounting bolts (196863) to back of the scanner head. Do not tighten screws all the way.



Figure 3-11. Scanner Head Mounting Screws

- 2. Locate the power, Ethernet, and three USB-A cables extending from the upper column head opening.
- 3. Connect cables from the column assembly to the scanner head (Table 3-1).



Figure 3-12. Scanner Head I/O

Item No.	Description
1	Power (DC in)
2	Ethernet Port
3	USB Ports (3 used)
4	Display Port Connections (not used)

Table 3-1. Scanner Head Connection List



- 4. Align the mounting screw heads with keyholes in the scanner head mount.
- 5. Route the excess cable back in the upper column assembly.
- 6. Slide the screw heads into the keyholes in the scanner head mount.



Figure 3-13. Slide Mounting Screw Heads into Keyholes

7. Slide the scanner head downward into the keyholes.



Figure 3-14. Slide Scanner Head Downward



8. Torque mounting bolts to 50 in-lb (5.7 N-m). Ensure the scanner head remains parallel with the baseplate.

() IMPORTANT: The scanner head mounting hardware must be torqued to 50 in-lb (5.7 N-m) to prevent possible movement.



Figure 3-15. Tighten Scanner Head Mounting Screws

3.1.7 Connect Power and Accessory Cables

1. Connect power and optional accessory cables to the ports on the back of the iDimension Plus base (Table 3-2).

() IMPORTANT: Attach the power cable connector to the port, before plugging the power cable connector into an AC outlet.



Figure 3-16. Power and Accessory Connections

Item No.	Qty	Description		
1	2	Standard USB Ports (type A, for use with scale, barcode scanner or USB hub)		
2	1	thernet Port (used to connect to network in order to interface compatible software)		
3	1	Power (DC in)		

Table 3-2. Electrical Base connections



2. A fully assembled iDimension Plus should resemble Figure 3-17.



Figure 3-17. iDimension Plus Assembled



4.0 Replacement Parts

This section provides an overview of the replacement part available for the iDimension Plus.

4.1 Electronic Replacement Parts



Table 4-1. Adjustable iDimension Plus Parts List



4.2 Fasteners Replacement Parts

4.2.1 Heading Mounting Fasteners



Figure 4-1. iDimension Plus Replacement Parts

Item No.	Part No.	Description	Qty.
1	196863	Screw, Cap M4x0.7x10 Hex Socket Head Full Thread	4

Table 4-2. iDimension Plus Replacement Parts



4.2.2 Base Mounting Fasteners



Figure 4-2. iDimension Plus Replacement Parts

Item No.	Part No.	Description	Qty.
1	196244	Screw, Cap M5-0.8x16 Flat Head Hex Drive 18-8 SST	8

Table 4-3. iDimension Plus Replacement Parts



4.2.3 Column and Monitor Mounting Fasteners



Figure 4-3. iDimension Plus Replacement Parts

Item No.	Part No.	Description		
1	225899	Screw, Cap, M4-0.7 x 12mm Flat Head Socket, Black Oxide Alloy Steel	6	
2	226631	Thumbscrew	2	
3	196863	Screw, Cap M4x0.7x10 Hex Socket Head Full Thread	4	

Table 4-4. iDimension Plus Replacement Parts







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